

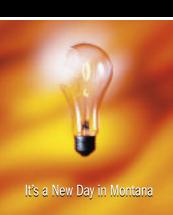


# Montana is Wind Country Montana leads the nation in wind energy

Montana leads the nation in wind energy power potential and the state is at the center of North America's wind heartland. Wind energy is clean and renewable and provides the "green" complement to Montana's world class reserves of coal as well as oil and natural gas. Much of Montana's wind has yet to be tapped and represents a great investment opportunity.

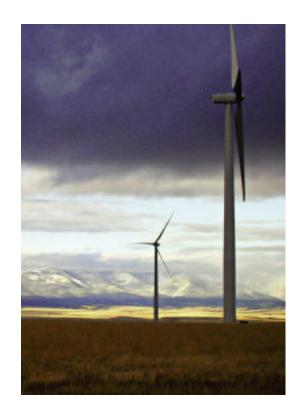






### **MONTANA'S WIND ENERGY OBJECTIVES**

- Support all types of wind development from large scale wind farms to distributed generation serving individual farms, businesses and homes.
- Combine clean renewable wind with conventional and advanced fossil power sources into a "green" energy package.
- Create a domestic energy production economy in America's heartland working toward the national goal of energy independence.
- Advance the construction of electric transmission lines connecting wind resources in Montana to load centers in the western and eastern electric grid interconnections.



#### MONTANA DEMOGRAPHICS: AT-A-GLANCE

Land area: 147,138 square miles				
Population (2005	): 935,670			
Urban: 54%				
Rural: 46%				
Persons per squa	are mile: 6.	4		
Major Cities:				
Billings	96,977	Missoula 61,790		
Great Falls	56,503	Bozeman 32,414		
Butte	32,393	Helena 27,196		

Gross state income (million	s of current dollars): \$27,701
Total State Tax (2005): \$1,	787,889,000 Rank: 47
Total Tax Per Capita: \$1,93	10 Rank: 35
Total Montana Exports:	\$842.7 million
Wheat	\$278.0 million
Industrial Machinery	\$110.3 million
Inorganic Chemicals	\$75.3 million
Paper and paperboard	\$39.0 million
Wood and Wood Products	\$33.4 million
Pracious motals	\$10.3 million

	n labor force: 483,043 oloyed: 461,746
	nouseholds: 358,667 sons per household: 2.45
	pita personal income (2005): \$29,387
Media	n household income (2004): \$35,201
Avera	ge wage per job: \$27,721

#### WIND ENERGY ASSETS

- Montana's vast wind resource is rated number one in the nation for class 3 wind and above.
- Almost unlimited sites available on federal, state, and private lands.
- The Montana Department of Natural Resources and Conservation has programs for wind energy exploration and development on State School Trust Land.
- Most wind sites are located in low population areas, where it's easier to avoid visual and other conflicts, where folks welcome wind energy projects and need economic development.
- Montana's Department of Environmental Quality has been gathering wind data and is an excellent source of wind data (visit www.energizemontana.com for wind info).
- Some counties such as Cascade County offer developers GIS based maps depicting the wind resource classes, roads, transmission lines, property ownership and topography. Their officials stand ready to make land owners introductions and to do what it takes to help developers turn prospects into projects.

### **WIND PROJECTS**

Two wind projects have gone on line since 2005; the Horseshoe Bend project (9 MW in Cascade County) and the Judith Gap project (135 MW in Wheatland County) moved Montana from a ranking of 50th to 15th in the nation in wind energy out put. Numerous smaller distributed wind energy projects are dispersed across the state. Other big planned developments include:

Valley County: 500 MW

Jefferson County: 35 MW

Stillwater County: 400-450 MW

Glacier County: 175 MW

Toole County: 120 MW

Meagher/Wheatland Counties: 50-100 MW



#### **MONTANA WIND MAP**



Class 3

Class 4

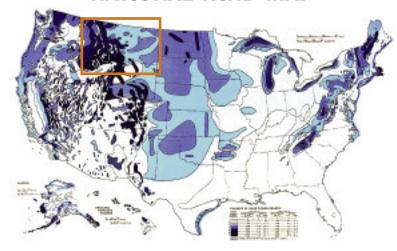
Class 5

Class 6

Class 7
Major Electric Transmission Line

Montana is the wind energy capital of the United States. The national map (right) shows that Montana has the highest concentration of wind power potential in the nation. The Montana map shows the best wind power locations the state has to offer while showing the proximity of electric transmission lines.

#### **NATIONAL WIND MAP**



Wind speeds estimated by TrueWind Solutions (http://www.windpowermaps.org), 2002 Montana State Library: map #07deq0049, September 6, 2006

#### **ENVIRONMENTAL CONSIDERATIONS**

- Avian studies show impacts to birds can be mitigated.
- Visual objections? Not many. Wind resources are located where visual impacts are minimal due to the relatively small population nearby.
- Wind energy is clean, renewable, and produces zero green house gases (GHG's).
- Market demand for "green" power is growing—California will need an additional 21,000MW of electricity by 2025 and the West as a whole 30,000MW by 2015 and is legally demanding that imported electricity be "green" with the adoption of a GHG standard in 2005.
- **Governor Schweitzer** was the nation's first governor to endorse the national 25 x '25 initiative; a grass roots effort gaining widespread bipartisan support to pass federal legislation requiring 25% of US energy demand be supplied by renewable energy by 2025. He endorses coordinated permitting processes among state agencies and designates one lead agency to spearhead the State review process. He also encourages multi-state and state/federal cooperative agreements to streamline permitting of multi-jurisdictional transmission lines and wind projects.

## TRANSMISSION TO MARKET

- New export paths are being planned: NorthernLights HVDC line (3,000/6,000 MW) Montana/Idaho – WECC Path 18 (1,000 MW)
- Frontier Project (3,000 MW)

  Montana Alberta Tie (600 MW)
- Additional corridors on federal and private lands are currently being identified through federal processes.
- All existing transmission lines, from 69 kV to 500kV, are mapped and available.
- Transmission expansion serving wind can also serve other power needs.
- The Bonneville Power Administration is planning upgrades to its transmission lines from Montana to the Pacific Northwest that will add 750 MW of capacity.



### **FEDERAL INCENTIVES**

- Federal Production Tax Credit: The Wind Energy Production Tax Credit (PTC) is a per kilowatt-hour tax credit for wind-generated electricity. Available during the first 10 years of operation, it provides 1.5 cents per kWh credit adjusted annually for inflation. The adjusted credit amount for 2005 was 1.9 cents per kWh.
- **Depreciation:** Double-declining balance, five-year depreciation schedule.



- Farm Security and Rural Investment Act of 2002 (Farm Bill): has several provisions for renewable energy.
- **Public Utilities Regulatory Policy Act of 1978** (PURPA): was enacted as part of the National Energy Act of 1978, during a time of unprecedented energy supply instability in the United States. The law requires utilities to purchase energy from non-utility generators or small renewable energy producers that can produce electricity for less than what it would have cost for the utility to generate the power, or the "avoided cost."
- **Clean Renewable Energy Bonds:** An incentive, sponsored by Senator Baucus, for governmental bodies (including tribal governments), municipal utilities and rural electric cooperatives was included in the 2005 energy bill.

#### **STATE INCENTIVES**

Montana adopted a state renewable energy portfolio standard in 2005 requiring 15% renewable power by 2015. Listed below are other incentives available from the state of Montana:

**15-6-201(4) MCA** Property tax exemption for buildings using renewable energy.

**15-6-225 MCA** Property tax exemption for renewable generating facilities under 1 MW.

**15-24-1401 MCA** Property tax reduction for renewable generating facilities 1 MW or more.

15-31-124 MCA New or expanded industry tax credit.

**15-32-201 MCA** Tax credits for individuals installing nonfossil forms of generation.

**15-32-401 MCA** Alternative energy investment tax credit.

**15-72-104 MCA** Exemption from wholesale energy transaction tax.



#### **MONTANA MEANS BUSINESS**





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